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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,109

03/24/2004

Susumu Kashiwase

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4170

29619 7590 06/12/2008  
SCHULTE ROTH & ZABEL LLP  
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EXAMINER

YUN, EUGENE

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

06/12/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/808,109	<b>Applicant(s)</b> KASHIWASE, SUSUMU	
	<b>Examiner</b> EUGENE YUN	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/20/2008 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takai (US 6,509,865) in view of Obayashi (US 7,062,273).

Referring to Claim 1, Takai teaches a wireless communication apparatus, that communicates with a base station, comprising:

An adaptive antenna (see col. 3, lines 11-14);

A receiving portion for receiving a control signal, to control directivity of said adaptive antenna, transmitted from said base station (see col. 3, lines 20-24); and

A control portion for controlling the directivity of said adaptive antenna to be a beam steering or a null steering based on the control signal (see col. 3, lines 15-18).

Takai does not teach the wireless communication apparatus as a mobile wireless communication apparatus that communicates wirelessly with a base station. Obayashi teaches the wireless communication apparatus as a mobile wireless communication apparatus that communicates wirelessly with a base station (see fig. 1 where the mobile device 100 has an adaptive antenna 110 and communicates wirelessly with base stations 101 and 102). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Obayashi to said device of Takai in order to consume more power while operating an adaptive antenna.

Referring to Claim 2, Takai also teaches said control portion controlling the directivity of said adaptive antenna by changing weighting of the beam steering and the null steering of said adaptive antenna (see col. 3, lines 40-52).

Referring to Claim 3, Takai also teaches said control portion controlling the directivity of said adaptive antenna every frequency used by said wireless communication apparatus (see col. 7, lines 8-15).

Referring to Claim 4, Takai also teaches a receiving quality monitoring portion for monitoring quality of a signal from said base station (see col. 12, lines 35-40); and

A quality information transmitting portion for transmitting information about quality of a receiving signal monitored by said receiving quality monitoring portion to said base station (see col. 12, lines 40-44),

Wherein said control portion controls the directivity of said adaptive antenna based on the control signal which said base station calculates based on the quality information (see col. 12, lines 45-52).

Referring to Claim 5, Takai also teaches controlling the directivity of said adaptive antenna based on the control signal which said base station produces according to the number of wireless communication apparatuses connected to said base station (see col. 3, lines 53-64).

Referring to Claim 6, Takai also teaches controlling the directivity of said adaptive antenna based on the control signal which said base station produces according to the amount of communication in said base station (see col. 3, lines 53-64).

Referring to Claim 7, Takai also teaches a battery remaining amount detection portion for detecting a remaining amount of a battery powering said wireless communication apparatus, wherein said control portion stops the control of the directivity of said adaptive antenna based on a result of comparison between a predetermined threshold value and the remaining amount of said battery detected by said battery remaining amount detection portion (see col. 11, lines 20-30).

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUGENE YUN whose telephone number is (571)272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571)272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eugene Yun  
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